Systemic and cybernetic knowingness: relating "(a)symmetry" and "subtleness"?

Project onto the contemporary complexity versus the information-knowledge dynamics

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Abstract

Purpose – The purpose of this paper is to present research work on systemic and cybernetic knowingness: relating according to classical and original concepts: "(a)symmetry" and "subtleness". There is an entire project focused on contemporary complexity versus the information-knowledge dynamics.

Design/methodology/approach – The starting point is related to the denominations: "perverse effects" and "asymmetric conflicts". The paper supports innovative (a)symmetric approaches on human beings, ITC and community: shrinking the gap between humanist and technologist perspectives; promoting an anthropocentric perspective with stimuli from the real world expressed by (old and new) ideas regarding the (re)construction of a world/e-world balance through/within the triad: production, intelligence and morality; illustrating a positive e-world response by sketching innovative, synergy-based, experimental ITC models, considering metaphors linked to the idea of an open definition of subtleness.

Findings – The paper finds a shrinking gap between our world and our e-world, able to *integrate* biased perspectives and realising a composition of (a)symmetric matter within information/knowledge economy/society. Based on semantic transfer, there is a promising path to a creative partnership between humanists and technologists within the interactive modelling: connectedness-communication versus incursion-anticipation. From a knowledge engineering perspective, a solution can be reached more effectively by: a Wienerian view on the information and knowledge as (a)symmetric concepts/constructs – and a dually Göedelian view on the observability and controllability of a subtle entity/system toward a wisdom and/or consciousness society.

Originality/value – This paper provides information and knowledge on "information-knowledge dynamics" research.

Keywords Cybernetics, Systems theory, Cognition modelling, Knowledge economy

Paper type Research paper

We put thirty spokes together and call it a wheel; but it is on the space where there is nothing that the usefulness of the wheel depends (Lao Zi).

[...] most people are unaware that they are ignorant of the essential nature of their subject, whatever it may be. Believing that they know it, they do not begin their discussion by agreeing about the use of terms, with the natural result that as they proceed they fall into self-contradiction and misunderstandings (Socrates/Plato).

1. Toward an (axiomatic) subtle approach on our world(s)

1.1 On the networking of sciences and humankind

The representational map of sciences in the second half of the twentieth century toward the twenty-first century has an abyssal form, different from the forms related to the set of sciences during the Greek antiquity, the Renaissance period, the Enlightenment and Ampere's classification of sciences. The scientific disciplines had evolved "vertically" on the profoundness of knowledge (thus the major cause of the "abyssal form"), but there were and are interdisciplinary challenges ("horizontally" marked between them). The result is a *network of sciences* (inside an open *knowledge space*). Now and here, it may be "vertically-horizontally" delimited, but it also regards the huge advance of the humankind: inside the socially dynamic deepness, inside the volatility of the human-machine prospect, and inside its neural individual and collective (non-)revealed faculties, too. So, the network of sciences – here as a huge (but not complete) model upon our real, but not on the (Universal) Reality. This huge model upon our real is proper to the comprehension of both the profoundness of knowledge and the relations between sciences. Briefly, for this last pole, there is a kind of a *fast-forward scientific connection* acting probabilistic and fuzzy (according to the scientific stages of representation) at the intersection between the social background of sciences and the neural background(s) of the actors of sciences; to mark it as *social***neural segment.*

This segment (and may be other entities of similarly and complementary types) acts as a stimulus to take a role on the suitable evolving of the network of sciences. If the "vertically" evolving of the profoundness of knowledge "exceeds" the "horizontally" interdisciplinary challenges, then the asymmetry(ies) of the respective network of sciences may occur(s) on solving equivalent humankind problem(s), within parallel ways and classical methods, within different scientific domains, as prevailing their low links – and the heterogeneity of the human dialogue which would follow.

The interference between the contemporaneous scientific network and the social and neural backgrounds may be analyzed, depicted, and represented through a lot of (classically – today) cycles (across the resources involved: human, technical, social aggregation, neural resources of the mind and of the consciousness). One of these cycles is an inner one for this network of sciences. It is a *generator cycle*, starting from the social*neural segment. It acts according with the profoundness of knowledge, and will be forever (re)turning within the social*neural segment. The existence of this cycle elicits the (cyclic) redefining of the social and neural backgrounds (interdisciplinary comprehended). The *problem of an essential "optimal" period of time (and space)* proper *to observe/re-observe, to forecast/re-forecast* upon the social*neural segment, upon its generator cycle, is an outdated one (mainly by the reality beyond the concepts of "wisdom" versus "expertise", and "satisfaction" versus "happiness" and "alienation") it is beyond space and time. Attaining, reaching, grasping the entireness of an essential "optimal" period, or only trying and trying to attempt it, the individual and/or the community flow from this type of forecasting to the social prevention, to social education, to social adaptation and (re)construction. So, there are some long-termed steps, some outstanding cycles – more or less related to the above introduced generator cycle and the social*neural segment.

There results the necessity of some conceptual recovering in front of the nearly classical flow: *multi-theme – multi-disciplinary – co-disciplinary – inter-disciplinary –*

transdisciplinary – cross-disciplinary approaches and the related status of the *history and methodology, logic, philosophy of science*. This necessary recovery recollects as entireness the holistic necessity resulting and belonging to the dynamics of "vertical", "horizontal" dimensions and huge advance of the humankind related to the network of sciences. Despite the unbroken traditional borders of scientific cognition, more and more links appear between:

- "Exact" sciences and "human" sciences;
- science and technology – according to an increasing engineering variety, social assistance, (self-) employment and entertainment/leisure within e-systems;
- co-existence of philosophy and scientific domains (into a wide (possible to be depicted) *science-poetry-philosophy/theology-arts-management-science ring*); and
- academic area and the large public area – more interactively connected through actual e-libraries, mass media and www.internet facilities.

This **network of sciences** (together with its cycles; dependent on the models which would tend to comprehend it) exists through and is dedicated to **humankind**. But there is a relative autonomy of this network of sciences (as any *entity/system*: a (hypothetical) reality, a model, an ideal). Most regarding this context of relative autonomy of this network, there is a *generator of performances*; *performances* carried out by individuals. "Some" individuals become or not contextual individuals through *competencies* – mainly supported by communities. But, for each person in a harmonic relation to the global ecological system, it is very important that the contextual competencies appear resonant with the pre-attained performances. May it be similarly stated within a low ecological system? Maybe (fuzzy) no (Zadeh, 1965; Negoitã and Ralescu, 1975; Teodorescu *et al.*, 2001). There is a complex reciprocal *induction* between neural and social cycles and performances-competencies balance/over an observable humankind; hard observable by itself, and by the seekers of performances and/or competent observers.

1.2 A possible problem and its non-balanced (conflict-consensus) representation. The contemporary world may reflect a general-distortion status on the networking of sciences and humankind
The quasi-exponential scientific *discoveries* (on our macrocosmos: astrophysics; on our biological being: genetics; on our microcosmos: quantum physics) and *technological performances* of a major string of *inventions* (some of them based on the fifth and sixth computer generations and future bionic and quantum computing: expert systems involving in artificial intelligence and life and, respective, neural networks; bio and nano-technologies; composite materials and ultra-stable structures) do *not generalize competence* from *human-technique innovative* systems towards *ecological (social(economic(industrial))))* systems. (These would comprise the economic versus industrial tension to provide a harmonic outlook within and to social and ecological systems; and to receive a monotonous reaction versus keen social and ecological demands.).

Also, reciprocal discrepancies among great human communities (analyzed with global models of mankind (Meadows *et al.*, 1972; Mesarovic and Pestel, 1974; Naisbitt, 1982, and others) underline cultural distortions and prove the self-generative complexity of the real (social) life. There is a lack of a real-time global description of mankind.

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There is a hardly improved state of art into operative problem solving (in spite of the September 2000 overcome eight directions emerged through United Nations' approach to the new Millennium, and in spite of a century of management for industrial macro-domain). In these contexts, the thesis of Rousseau (1751) seems more present than ever (*the societal moral is not better improved versus sciences and arts continuous progress*).

It is possible that the huge quasi-exponential technological performances to be hardly balanced by an equivalent "huge" analytical accumulation of philosophical and literary-artistic introspection – for thousands of years – of mankind and, respective, sociological, ethnological, anthropological psychological search of mankind and of human being – for approximate last two centuries. But the *human live and (re)action*, under this hardly balanced state, *may reveal an illumination* through an *inter/transdisciplinary* (Nicolescu, 1996)*, intercultural, and ecumenical outlook* upon the *contemporary interaction: NETWORK OF SCIENCES [. . .] OBSERVABLE HUMANKIND – within SYSTEMIC AND CYBERNETIC KNOWINGNESS.*

There must be a self-generative belief in the emergence of a recursive analytical/synthetic open meta-model of the contemporary development toward our really too complex (social) life. Also, dually, there must be an active induction from the real life to this open meta-model. The models that overrun life and the life that surpasses model after model are "poor" entities. Both sides must bear a reciprocal discourse upon sciences and arts – inwards a *common language*. This common language would have *two self-recursive dialects*; the first dialect is entitled as mostly receptive to *action, informational, decisional equilibria* [thus resulting the *circular triad: (information1; decision; action; informational2)*] – the second dialect is entitled as mostly emissive of *responsibility* (as a *meta-equilibrium* between *evolution* and *security*); thus resulting the *subtle rhythmic triad: (awareness; insight; action)*. Both these dialects are disposed around and closely around profound zone(s); these dialects are reciprocally structured like *nuclei of the metasystem* characterized by that common language.

This study, from a methodological perspective, proposes a dual *Sociocybernetics and Cognitive Science* approach – *modeling, simulation and (re)acting*.

All these may enhance the scientific community with a centennial topic: illumination through an *inter/transdisciplinary, intercultural, and ecumenical outlook* upon the *contemporary interaction*: network of sciences [. . .] observable humankind – within systemic and cybernetic knowingness. To comprehend this type of "illumination" and "interaction" through/as a *subtle outlook* – so, an *outlook (if and only if it would exist)* unable to be analyzed, depicted, represented only and only according to *probability/statistic and/or fuzziness* (Zadeh, 1965; Negoită and Ralescu, 1975; Teodorescu *et al.*, 2001). So, let us denominate the possible centennial topic as a *subtle outlook* upon the contemporary interaction: *Network of sciences [. . .] Observable humankind – within systemic and cybernetic knowingness* – (**soN. . .Osck**). The second dialect, entitled as mostly emissive, would be prevalent within the scientific community.

Also, all these may enhance us, the human beings, with this centennial topic focused to the real worldwide community. The holistic-intuitive description of this community is actually indebted to the *world wide web* and *internet*, putted in act by the *electronics, communication and computer science* – as long-term theoretic and praxis acquisitions.

An actor of this putting in act is the *contemporary virtual human being* within *internet* search engines, hypertexts, data and knowledge bases, e-work (beside the large fan of e-activities) and actual and prospected e-creation. The first dialect, entitled as mostly receptive, would be prevalent within the worldwide community.

It is just the major task supported by the **soN…Osck** to link the *nuclei of the metasystem* characterized by that common language indebted to bear a reciprocal discourse upon sciences and arts. Is it a **symmetry/asymmetry matter?**

Also, is the *contemporary interaction: network of sciences […] observable humankind – within systemic and cybernetic knowingness a symmetry/asymmetry matter?*

Which is the difference between the responses at these two inquiries?

1.3 Spiru Haret and his "social mechanics" ("mécanique sociale"). An "in ovo" attempt on the networking of sciences and humankind

Geniuses may redefine our days; the faith may still be a salvation. But to think more actively, within inter/trans-disciplinary approaches, would be an actual aim connected with *the REAL (societal) WORLD*. The above-presented statements are meant to indicate a "long-termed" conception, and its associated scientific belief, comprehending its deep intentionality (Nicolescu, 1996).

Into this context, it is a proper place to dedicate this study, relating it to some of the profound Romanian scientific interdisciplinary efforts; these are emergent (geographically) far from Western elite. In Romania, the scientific activity is gaining powers reminding us of some great personalities, one of them being **Spiru C. Haret** (February 15, 1851-December 17, 1912).

Born at Iaşi, into a family of a juridical official, Armenian. Orphan from 15 years, he had assumed the care for his brothers and sisters. Mathematician (doctorate at Paris, 1878: "Onto the invariability of the great axes of the planets"; thesis of "impact"), pedagogician, sociologist, liberal political personality (Ministry of Education and Cults: 1897-1899, 1901-1904, 1907-1910). Professor at University from Bucharest, correspondent member (1879) and member (1892) of Romanian Academy. He was through the first social analysts who had found the utility of the profound mathematic form into the representation of the social complexity ("Social Mechanics", Paris – Bucharest, 1910; cognitive metaphor and cognitive interdisciplinary model). He had had a fundamental contribution for the reorganization of the all degrees of Romanian education (1883-1910; into epoch he was super-named as "the man of school/the soul of the school"). He had erected the basis of an essentially people-dedicated movement, and of the educators from the rural area, but also an original and enlarged action essentially cooperatist. Founder of "Revista generală a învăţământului" (1905). He had prepared the new calendar and the census for 1913. The International Astronomic Union had named "Haret" a crater from the invisible part of the Moon (1976).

Haret (1910) is the author of "*Mécanique sociale*" ("*Social Mechanics*"). This work is not at all a re-make over 70 years (August Comte was the first user of the terms: social static and social dynamics), and (today) may be more than an anticipatory outlook toward sociology and mathematics interdisciplinary co-status. Spiru Haret's interdisciplinary work starts a renewed conceptual and modeling construction – as a basis for online or/and consecutive praxis. Spiru Haret was not only a famous mathematician-astronomer of his time, but he was considering to "shifting" the

celestial relational harmony inside the social representation as research basis and praxis. This was not at all to "copy" some kind of deterministic methodologies (quantitative) inside the fuzzy corpus of the sociological methodology of that time. His apparent methodological knowledge transfer has a deeper basis: the *search for the synergy of humankind production, intelligence and morality*; he depicted the civilization topos as a flow to aggregate the societal resources, representing and solving its problems.

Is there a *symmetry/asymmetry matter between the Great Nature and Our Society?* Is there a *symmetry/asymmetry matter across the flows of humankind production, intelligence and morality (between the Great Nature and Our Society)?* Which is the *difference between the responses at these two inquiries?* (Fuller, 1969; Parra-Luna, 1998).

1.4 Two challenges (sociology: "perverse effects"; military theory: "asymmetric conflicts")

As an initial point of view, there is the empirically comprised hypothesis that if there are absent some inquiries and/or simple questions on the type of those from the end of the paragraphs 1.3. and 1.4., than other types of statements would prevail. May be that the following sequences of some texts are not on the best of analysis, but, at least, a problem is establish. May be a keen analysis to be within the best, during a next future. The following sequences are collected from the *Sociology* domain (*I:* referring the *"perverse effects"* construct), and from the *Military Theory* domain (*II:* referring the *"asymmetric conflicts"* construct).

There is, also, the empirically comprised hypothesis that the backgrounds of the both constructs are suitable candidates to refer "*subtle outlook upon the contemporary interaction: network of sciences [. . .] observable humankind – within systemic and cybernetic knowingness*":

I: Sociology domain (referring the *"perverse effects"* construct – synthesis of four sample-studies merged into the next double Table I, within internet containing of more than 200,000 items):

To point on the magnitude far from "1"/indicators comprised above, the last column.

There are two important personalities as forerunners and promoters of the *"perverse effects"* construct into the contemporary sociological analysis:

Robert K. Merton, referring to as the *Law of Unforeseen Consequences* ("The unanticipated consequences of purposive social action, *American Sociological Review*, Vol. 1 No. 6, December 1936), was underlying on the "**unanticipated consequences**" of *"purposive social action"*, emphasizing that his term *"purposive action [. . .] [is exclusively] concerned with* $<<conduct>>$ *as distinct from* $<<behavior>>$. *That is, with action that involves motives and consequently a choice between various alternatives"*.

Raymond Boudon, with *Effects Pervers et Ordre Social*, PUF, 1977 (there is a significant revision of Raymond Boudon's "**perverse effects**" construct, by *J. Elster* in: "Logic and society. contradictions and possible worlds", *The British Journal of Sociology*, Vol. 33 No. 4, December 1982; and an important step to acknowledge "perverse effects" construct was done by *Mancur Olson*, another personality: "Big bills left on the sidewalk: why some nations are rich and others are poor?", *Journal of Economic Perspectives*, Vol. 10 No. 2, 1966).

II: Military Theory domain (referring, *into the next box*, on some samples-books/journal, the *"asymmetric conflicts"* construct, within internet containing of more than 1.5 million items):

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No. of the study	Authors	Title of the study	(e-)publication items
1	Daylian M. Cain, George Loewenstein and Don A. Moore	"The dirt on coming clean: perverse effects of disclosing conflicts of interest"	The University of Chicago/*Journal of Legal Studies*, Vol. 34; January, 2005
2	Luc Behaghel, Bruno Crépon and Béatrice Sédillot	"The perverse effects of partial employment protection reform: experience rating and French older workers"	Laboratoire d'economie Appliquee, Campus Paris-Jourdan, Ecole Normale Supérieure, Paris; September 2006
3	Andrea Cerroni	"Socio-cognitive perverse effects in peer review/reflections and proposals"	University of Milan-Bicocca, Department of Sociology and Social Research/*Journal of Science Communication* (*JCOM*) 2(3); September 2003
4	Claude-Piron	"The hidden perverse effects of the current system of international communication"	www.Claude-Piron.ch; 2003

(*continued*)

Table I.
four samples of empirical data on "perverse effects" construct; an indicator for analyzing this construct

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Table I.

No. of the study	Occurrence of "effects"	Occurrence of "perverse effects"	Occurrence of "perverse"	Number of pages (TNR 12)/study	"perverse effect/perverse" ratio; "perverse effect/effect" ratio; " <<added >> ratio/no.pag."
1	23+5=28	3+1=4	21	25	4/21=0.19 4/28=0.14 0.19+0.14=0.33 0.33/25=0.0133 There are 21 sample of "feedback" (l)
2	100+9=109	3+1=4	7+1=8	46	4/8=0.5 4/109=0.037 0.5+0.037=0.537 0.537/25=0.0117
3	10+3=13	1	1+1=2	12	2/12=0.17 2/13=0.15 0.17+0.15=0.32 0.32/12=0.0267
4	16	10+3=13	13	12	13/13=1 13/16=0.81 1+0.81=1.81 1.81/12=0.1510

Robert R. Tomes, Relearning Counterinsurgency Warfare, Parmeters Spring, 2004;
<< **Asymmetric warfare** originally referred to war between two or more actors or groups
whose relative military power differs significantly. Contemporary military thinkers tend to
broaden this to include asymmetry of strategy or tactics; today "asymmetric warfare" can
describe a conflict in which the resources of two belligerents differ in essence and in the
struggle, interact and attempt to exploit each other's characteristic weaknesses. Such
struggles often involve strategies and tactics of unconventional warfare, the "weaker"
combatants attempting to use strategy to offset deficiencies in quantity or quality >>.

Ivan Arreguin-Toft, How the Weak Win Wars: A Theory of Asymmetric Conflict. The
Cambridge University Press, December 2005; << The likelihood of victory and defeat in
asymmetric conflicts depends on the interaction of the strategies weak and strong actors
use. Using statistical and in-depth historical analyses of conflicts spanning two hundred
years, Ivan Arreguin-Toft shows that, independent of regime type and weapons technology,
the interaction of similar strategic approaches favors strong actors, while opposite strategic
approaches favor the weak. This new approach to understanding asymmetric conflicts allows
us to makes sense of how the USA was able to win its war in Afghanistan (2002) in a few
months, while the Soviet Union lost after a decade of brutal war (1979-1989). Arreguin-Toft's
strategic interaction theory has implications not only for international relations theory, but
for policymakers grappling with interstate and civil wars, as well as terrorism. >>.

The journal *Dynamics of Asymmetric Conflict***,** published by *Routledge,* "contribute to
understanding and ameliorating conflicts between states and non-state challengers. These
conflicts too often lead to violence, sometimes to the extremes of terrorism or genocide.
Understanding the trajectory to violence requires examination of conflicts that do not escalate
to violence as well as those that do. This means studying individuals, groups, and movements
who challenge the state without violence, as well as those who turn to radicalism and
terrorism. Similarly, it is necessary to study state agents, agencies, and policy makers who
respond to challenge without violence, as well as those who turn to torture, ethnic cleansing
and genocide". The keywords of the journal: give an analytic view of the multi-thematic
approach: *a*ctivism; anarchism; assassination; asymmetric conflict; dehumanization; ethnic
cleansing; ethno political conflict; extremism; fanaticism; genocide; globalization; insurgency;
political violence; protest; radicalization; rebellion; repression; social movement; state
terrorism; terrorism; torture.

If the authors of these sequences (I and II) would act accordingly to a *subtle approach*
soN...**Osck**, on each domain, it would be possible to attempt other constructs, or the
same termed but within other semantic/praxis contents. In both cases the diaphoric
metaphor: *The orchestra playing the conductor's role,* and an interdisciplinary
involvement of the disciplines *Sociocybernetics and Cognitive Science* would be
stimulating on the above hypothesis, and problem which is putted (Pãun, 1977). So,
here was arisen a hypothesis, and was putted a problem, starting from both above two
challenges (*I,* and *II*). I suppose that this metaphor constitute a better way to turn the
approach to the huge accumulation of work linked to the *1948* **Norbert Wiener**'s
Cybernetics (relating to the Greek term Kybernetes), and to the *1950* **Ludwig von
Bertalanffy**'s *General System Theory* (Wiener, 1948; Bertalanffy, 1968).

Would all these supply, on a partial way, a subtle outlook on the contemporary
human-machine nexus – within systemic and cybernetic knowingness, and to fundament
an *(axiomatic) subtle approach onto our anthropic world(s)*?

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1.5 The two challenges "face to face" an insight on our world(s)
Our world seems unitary and unique. But according to its step by step increased complexity, unto its obvious non-homogeneity, across the forever existence-reflection gap, and supporting this gap as basically cognitive criterion, it would be introduced three asymmetric *COUPLEs of AXIOMs* regarding the *Real-Metareal-Transreal-Prereal circular worlds*:

COUPLE of AXIOM 1:
PRIMAL 1:

To "start" the construction of a contextual relation of comprehension (but no explanation) through an observation upon the social world, which becomes itself real (social) world only through *existence-reflection* connections (Searle, 2000). So, it may result from an information/knowledge point of view. This insight draws out more types of *mental constructs* (the "visible dynamic" peaks connected to *mental concepts*). Let be the following introspection into the profoundness of our *Real World (RW): real (hypothetical) system, model (related to a real system), ideal system/norms, rational subject, profound zones (temporary not penetrable to rational subject's competencies), responsibility zones (narrow path between security and evolution of the cycle: real system – model – ideal system – rational subject – real system) […]* If it is accepted that the existence of our world is represented by a set of real entities and by a set of conceptual entities, then a rational subject delimits the observable from the non-observable real and the theoretic concepts from the non-theoretic concepts (The fuzziness approach is obvious possible – beyond the probabilistic approach (implemented through elaborated statistical and/or stochastic procedures)) (Figure 1).

DUAL 1:
There are some circular worlds – maybe there are other worlds, too (see Figure 2, Appendix).
COUPLE of AXIOM 2:
PRIMAL 2:

Let mind to draw up the "future research context" toward the terms "self and eco-consciousness". A context is proposed below by *P2* and *P3*. This context contains
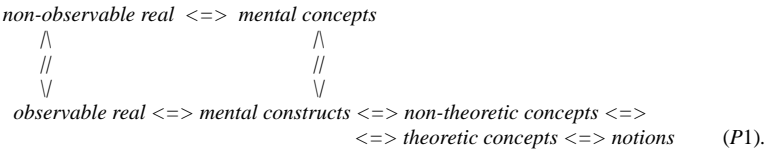
Figure 1.

```
non-observable real  <=>  mental concepts
        /\                        /\
        //                        //
        \/                        \/
observable real <=> mental constructs <=> non-theoretic concepts <=>
                              <=> theoretic concepts <=> notions        (P1).
```

Figure 2.
DUAL 1

belief <=>reasoning<=> rationality <=> logic <=> knowledge as an invariant, just into this Proposition 2:

```
          cy|faith   cy|ignorance in RW<=>  minding |cy
             |hope      |evidence  in e-W<=>   thinking|
personality <=>|will <=>|belief in  HMS  <=> reasoning|<=> rationality <=> logic <=> knowledge
<=> language                                                                    (P2).
```

three cycles (cy): (faith; hope; will), (ignorance; evidence; belief), (minding; thinking; reasoning). According to these cycles, let us to try a crossover: so, horizontally to define: Real World (RW), e-World (e-W), Human-Machine Systems (HMS), and, vertically to link the entities from our existence – reflection connections, and finally to promote (Figure 3):

DUAL 2 (see Figure 4, Appendix).

There are common mental concepts/constructs across the circular worlds – the equivalent half of the apple of knowledge and of the fruit of life (all this Biblical metaphors are used, here, as a millennial trace of human kind thinking upon the inner and external equilibrium within our entities. Each of us can use other metaphor correspondent to other sacred text and/or authorship wise texts – including the atheistic texts).

The contemporary ITC stage is diffused through *P2* by the following "local" interactions: (language; e-concepts – *rationality* – *logic*), (*knowledge* – admissible time) and (*reasoning* – expectations; personality). Why not to comprehend, above, within $<<$ language $>>$ and $<<$ *knowledge* $>>$ the "*the equivalent half of the apple of knowledge and of the fruit of life*"? Thus, it is prevailing the asymmetric characteristic within this couple of axiom:

COUPLE of AXIOM 3:
PRIMAL 3

The ITC stage is concentrated into *P3* as the following "local" interactions: INT1 (*model*; e-*concepts* $<=>$ *ideal/norms*), INT2 (*real*; *admissible time* $<=>$ *mental concept)* and INT3 (mental construct; *reasoning* $<=>$ *expectations*) (Figure 5).

So, the *P2* and *P3* try to comprehend (not to explain) how an operative sense of the "personality" (and "language") destroy(s) the inner holistic nature within *P2* and *P3* (It would be revealed through a holographic attempt, but out of the operative constrains.)

DUAL 3:

There is a different evolution across the circular worlds – there is the mental construct **qualia** as a *Centrum of the half of the apple of knowledge and of the fruit of life* (i.e. the relative presence of the essence of the processes of analysis – synthesis on

Real World => {notion}1 => (*real; model; ideal/norms*) => (*mental concept/construct*) => e-World
=>{notion}2; resulting another <u>cy</u> through the reverse: {notion}2 => {notion}1   (*P* 3) .

Figure 3.

INPUT DATA <=> INFORMATION <=> KNOWLEDGE <=> EXPERTISE <=>

             {<=> HAPPINESS   }
<=> WISDOM <=> {   } <=> OUTPUT DATA
             {<=> ALIENATION }

Figure 4.
DUAL 2

(*CR* I)
*Regarding the re*serv*oirs* (res) *and* gen*esis* (gen) *of* Inf*ormation* (Inf) *and Knowledge* (K)

    res Inf ◄–Table No. 3 ◄— {to DO}
        education ➤ Table No. 4 ➤ gen K

    res K ◄–Table No. 3 ◄— { MUST; WILL; CAN; DO }
        education ➤ Table No.4 ➤ gen I

Figure 5.

the RW, e-W, HMS/according to *P1-P3* – and, as far as possible "according" to DUAL 1-3, the relative absence of the tensions to comprehend the Entire Life and our Micro/Macro Cosmos within the (Universal) Reality) (see Figure 6, Appendix).

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1.6 Additional notes upon the circular world(s)

- *ARTS_exist.* would delimit the intended artistic creation as a discovery of the existence – being a metareal item (*ARTS_poss.* as an invention belongs to a prereal world);
- *POETRY_poss.* would delimit the intended poetic creation as an invention of the reflection – being a prereal item (*POETRY_exist.* as a discovery of the mental existence belongs to a metareal world);
- *SCIENCE_exist.* would delimit the intended scientific creation as a discovery of the existence – being a real item;
- *SCIENCE_poss.* would delimit the intended scientific creation as an invention of the reflection – being a metareal or prereal item;
- to COMBINE: the foresight, the plan, the sudden events – at least;
- to CONCORD: all the persons (from "me" to "they"), the groups, the communities, the planetary background, the cosmos – at least;
- to CONDUCT your community through its context – at least;
- (to COMBINE, to CONCORD, and to CONDUCT) as a *restricted humankind ACT/pattern*, and, respective (Transreal World, Prereal World, the returning at the Real World) as restricted humankind worlds; and
- (to BE, to HAVE, to COMBINE, to CONCORD, to CONDUCT) as a *generalized humankind ACT/pattern*, and respective (Real World, Metareal World, Transreal World, Prereal World, the returning at the Real World) as generalized humankind worlds, circular worlds; and

(*CR* II)
Regarding the circularity and rhythm within Information-Knowledge corpus

INPUT: heuristics / rhythm and *divergence* / "Output" / Subtleness flow

OUTPUT: algorithms / circularity and *convergence* / "Input" / Subtleness flow

Figure 6.
DUAL 3

[where the notions Responsibility and Meta-responsibility are used according to the frame of Table No. 2_a: m_Eq_MS and Eq_MS]
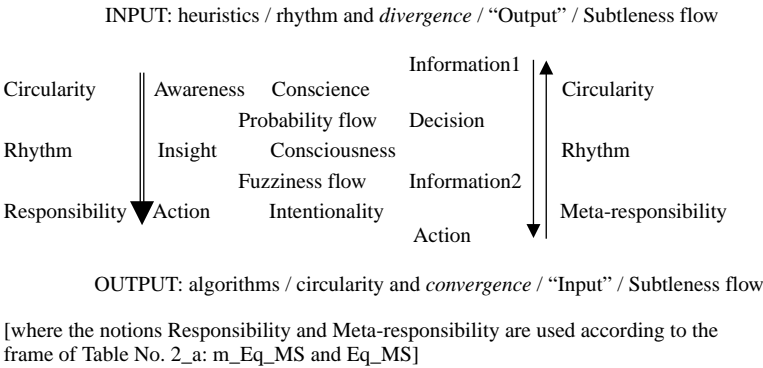
- The *restricted* and the *generalized humankind ACT/pattern* exist(s) into the context of these circular worlds. Within their representation(s), within their common and scientific comprehension (by understanding and explanation), there is a prevalent (cognitive, at least) outlook: the *asymmetry of the circular worlds*, the *asymmetry of "each to each" world*.

The *asymmetry of "each to each" world may be depicted as a* **multiple asymmetry**, around the generalized humankind worlds, circular worlds.

The *asymmetry of the circular worlds may be depicted as a* **holistic asymmetry**, around the generalized humankind worlds.

It may be considered: ASYMMETRIC SYSTEMS – according to their *asymmetry, multiple asymmetry, holistic asymmetry* – so asymmetry on different scale.

A symmetric system has sure an *obvious geometrical and/or physical axis of symmetry*. The axis (according to which one can state the asymmetry of an entity) may be a "less obvious" axis than a geometrical and/or physical axis. Thus, it is to comprehend on the possible utility of a subtle relevance. A relevance on the asserting on an *axis of asymmetry*. The content of the three above Axioms tries to engage ≪qualia≫ as an *axis of asymmetry* regarding the generalized humankind worlds.

The contemporary *network of sciences* seems to be an ASYMMETRIC ENTITY (if it is difficult to prove that this entity is a system). If this background is coherent, then, which is its *axis of asymmetry* – regarding the entire network? A (classical) approach would state that it would be "between" the "exact" sciences and "human" sciences. But only this approach draws up the necessity to mind on a subtle approach, too, on the deeper subject.

It is the place to consider that a symmetric system, according to its axis, has a "left" side and a "right" side. To consider, according to a European type of generating the sequence of writing (which is not the single type on the Earth), that there is an association of the Input and the "left" side of a system. Also, that there is an association of the output and the "right" side of a system. A symmetric system would have (on general terms) *symmetric (inner) states*. Would an asymmetric system have (on general terms) *asymmetric (inner) states*? Also, it draws up the necessity to mind on a subtle approach, too, on the deeper subject.

Has coherence the above-evoked "subtle" approaches (a subtle relevance on an *axis of asymmetry*, a subtle relevance on an *axis of asymmetry* of the *network of sciences*, and, *asymmetric (inner) states*)?

If this background is coherent, then, is it a suitable cover within the *contemporary interaction: network of sciences [...] observable humankind – within systemic and cybernetic knowingness* (**soN...Osck**) for all the above-evoked "subtle" approaches?

All these try to extend the actual horizon, within the common and academic dictionaries and encyclopedia, to focus the characteristics of symmetry, anti-symmetry and asymmetry only and only on the geometric and physic domains of the human knowledge.

Has a frame of an asymmetric entity/an asymmetric system a more suitable capacity to represent the real problems which had draw-up:

- the *"perverse effects" construct* into the contemporary sociological analysis; and
- the *"asymmetric conflicts" construct* on the actual research of the Military Theory domain?

If (fuzzy) "yes", then it is the contribution of the relevance of the generalized humankind worlds, and, respectively, the contribution of soN…Osck. If (fuzzy) "no", then there is the relevance of a singular world within us, our representation and our ideal(s) – and it may draw up to a classical point of equilibrium.

1.7 Notes upon the separation of different types and varieties of human thinking, across the circular world(s)

A deeper analysis of the generalized humankind worlds (starting from the three *COUPLEs of AXIOMs* regarding the *Real-Metareal-Transreal-Prereal circular worlds*) depends on criteria, and… on the criteria to proceed with criteria; all these being fundamental humankind-thinking pattern(s). Regarding the operational (on-line) criteria, to approach on the human thinking, there is equivalence with an operation of identification of standard items into pattern recognition processes, and, then the self-adapting to the real events, including the improving of the initial thesaurus of standard items. Lets to consider as primal the criterion regarding the position of the "self" inward the human thinking concentration (resulting: *reflexive* and *empirical* trends), and as dual the criterion, the temporal density of the human thinking concentration (resulting: *discursive* and *intuitive* trends). Then, to consider the approach of the actual and local entireness AND the neighborhood of actual and local elicitation of a meta_entireness (including the actual and local entireness). So, there are – as intersection of the reflexive and empirical trends with the discursive and intuitive trends – the following varieties of systemic thinking: ANALYTIC (the reflexive and the discursive topos), HOLISTIC (the reflexive and intuitive topos), EXPERIMENTAL (the empirical and the discursive topos), and EXPERIENTIAL (the empirical and the intuitive topos, which may be open to expand into other varieties, too). These four types of *cognitive modes* are to be putted into a balance with the types of *meta, non, and a-systemic thinking,* resulting from the position of a transparent or an opaque mental structure of thinking, relative with the consciousness and the under_consciousness mental processes of thinking.

From this above-mentioned approach, the mathematical analytical thinking is sufficiently described with the involving of the *mathematical operators of existence and possession* (membership/belonging) – as from Cantor's, Dedekind's, and Weierstrass' works.

Let be involved a re-new mathematical analytical thinking. It would be related with a special combination of the analytical, holistic, experimental, and experiential types of systemic thinking. It would be surrounding all these by the types of meta, non, and a-systemic thinking, and would be proved through the statistical lexicology of the frequency of words, into so many languages as it would be possible.

The first frame, selected here, synthesizes **Solomon Marcus**' conception of understanding and explaining onto our huge (cognitive) reality within only four cognitive modes (this being the original explanation within an ordinal relation) (Marcus, 1974, 1990). These four types of *cognitive modes* are embedded into a representational space generated by *two* dimensions (this representation being the original starting point of the understanding regarding this conception – at least as an original systematization):

(I)   "reflexive/empiric" dichotomy and ASYMMETRY; and
(II) "discursive/intuitive" dichotomy and ASYMMETRY.

"*Reflexive/empiric*" *dichotomy* comprises regarding Rational Subject's inclinations: *infinite tendencies/finite interaction*, and *competence/performance* duality.

"Discursive/intuitive" dichotomy comprises Rational Subject's logic/

"infra-logic" intellectual strategies comprehended as sequential/ non-sequential approaches.

This two dichotomies, as representational dimensions, are very closed to the complementary revealed significance through: *Generative Linguistic Theory*/*1964* **Naom Chomsky** (Chomsky, 1964) and, *Genetic Epistemology*/*1976* **Jean Piaget** (Piaget, 1976), and, respectively, *right/left brain hemisphere specialization* (asymmetry). So, in a way, our cognitive reality (innate and/or obtained) is projected upon the reality itself – here comprehended as through this proposed "the first frame". At a first glance, this frame is trying *to represent the huge reality as our reality*, but within tendency to be beyond a Sisyphus' attempt.

These two dichotomies, above presented, are not the "last stage" ones, as possibility; other dichotomies may be admitted, e.g. conscious/unconscious; open/closed.

This frame was synthetically represented as Table II. It means to (re)present four denominations of the modes of understanding and explaining onto the reality, and relates each mode to an outstanding philosopher. It is for each of the four (**analytic**: rational subject's *reflexive discourse* over the problematic environment; **holistic**: rational subject's *reflexive intuition* upon the whole reality embedding the currently problematic environment; **experimental**: rational subject being directly linked to a problematic environment and is supposed to converge to a solution, step by step, *locally acting* and deciding only and only according to the problematic environment responses – and not by his/her will, intuition, or any "inner" sensing; **experiential**: refers to the natural, spontaneous facts, expected and received from time to time from the problematic environment, then interpreted by the *"waiting"* rational subject, and not acting to influence in any way the problematic environment).

An ideal outlook would result by the association of the *holistic cognitive mode* with a *holistic capacity* (and, secondary, the *other three modes* toward the *deepness of an eco-consciousness* – related to individual rational subject and to the community). In support of this attempt to comprehend the concept of a holistic capacity by that of **equilibrium of a mixed system** (MS/human and technical resources – including e-resources Eq_MS) (Brix, 1989). Dependent on the context of a MS, its Eq may be inner or external based – the last case being marked through **meta_Equilibrium of a Mixed System** (m_Eq_MS) (Bulz, 2005). The following *frame of* Table II recollects some *other topoi of multiple asymmetry – pointing to the varieties of "determinism", five great personalities expressing their positions versus the inner/external (m_)Eq_MS,* and *the previous four cognitive modes* (Table II) – *expressed into this multiple asymmetry context as varieties of systemic thinking.*

1.8 Notes upon information-knowledge journey
It is evident that the realized dichotomist analysis, through these four cognitive modes, is a heuristic procedure of explanation and understanding onto reality – but the heuristic is used only as a tool, to draw out what is essential within an extraordinary

Cognitive modes	Discursive	Intuitive	
Reflexive	Analytic (Decartes)	Holistic (Plato)	**Table II.**
Empirical	Experimental (Bacon)	Experiential (Bergson)	Topoi of dual asymmetry

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variety of our human thinking and artificial intelligence reasoning (i.e. cognitive modes). This tool, in a large, is ***necessary*** to identify a basic variety of systemic thinking.

Here, and as it follows, it results that more than one mental construct is *necessary* for a rational subject, as one thinker to overpass "systemic" boundary, through his/her responsibility within a problematic environment.

There is another correlated question: is it *necessary and sufficient* for a rational subject that more than one mental construct will support to overpass "systemic" boundary, through his/her responsibility within a problematic environment? It would be another Sisyphus' attempt within *collective neural and linguistic survey on **Information** and **knowledge***.

Is this condition *"necessary and sufficient for a Rational Subject"* a correlated threshold to attempt from the background of anthropic symmetric systems to asymmetric systems?

So, here, remaining only at the ***necessary*** *assertion for a rational subject insight*, and connected to the proposed *information-knowledge journey*, to interpret:

(I) *Reflexive/empiric dichotomy* as an expression of a natural gift of/in/toward/by/with the rational subject. It is "**to have**" and to place his/her *mind* in one from the two ways:

*****reflexive** as *radiant re-acting* within information-knowledge journey; or

*****empiric** as *absorbent re-acting* within information-knowledge journey.

(II) *Discursive/intuitive dichotomy* as an expression of a personal effort of the evolving rational subject. It is "**to be**" and to place his/her *mind* in one from the two ways:

*****discursive** as mainly *continuous and monotonous acting* within information-knowledge journey; or

*****intuitive** as mainly *discontinuous and by variations acting* within information-knowledge journey.

{***** Here, also it is attempting the defining track that *"**mind**"* is *"a device for complex representation"*, a *necessary tool* within the information-knowledge journey.

****** Rarely an isolated individual (drawing up an ideal interactive link with his mind), but realistically an entire (historically stated) community may deal with an information-knowledge journey. It is the turning point: that a human community is more than its members within an information-knowledge journey. Obviously, it means *"**to have**" and "**to be**": thinking – reasoning – minding*. All these would be within the *collective mind*, supporting the *entire variety of the community*, according to *any language*: to think, to reason, to mind [to bear in mind as representation] within the *information and knowledge of a community*.}.

As a consequence, to all the above, it is proposed that *a point from information-knowledge journey*:

(I) to have radiant/absorbent re-action within **Information** pattern connected with, by, in the rational subject; and

(II) to be continuous/discontinuous acting within **Knowledge** pattern connected with, by, in the rational subject.

So, only and only in relation to/from the rational subject:

- *REMARK 1.* Information draws out itself within a *reaction* of a problematic environment toward (rarely "from") the rational subject.
- *REMARK 2.* Knowledge draws out itself within an *action* onto a problematic environment from (rarely "to") the rational subject.

These two remarks, as an entity: a set of two flow sentences, support three grammatical subjects: information, knowledge, rational subject. To avoid this case of "three grammatical subjects", and stating that above is a metaphorical pattern, but according to all above:

(I) Rational subject **has** information (rarely "**is**"; may be as an insider of that piece of information;, e.g. into our inquiry on climate change onto the earthly nature).

(II) Rational subject **is** knowledge (rarely "**has**"; may be as an outsider of that piece of knowledge;, e.g. into a transmitting act of a sacred and/or secret piece of knowledge from a dying predecessor to a successor in front of a risky and an uncertain domain).

To comprehend and to explain according to these relations (based on **"To HAVE"** and **"To BE" axes**) is the focalization of this study.

To comprehend, only, and to explain, only, are two other separate Sisyphus' attempts within *collective neural and linguistic survey on* **Information** *and* **Knowledge**. This study supports the avoidance of any separate treatment of *Information and Knowledge* (Blaga, 1920):

> "To HAVE" and "To BE" axes, above involved, would refer, mainly: "To BE": our world within its complexity, and "To HAVE": the complexity of our world representation. The plane "To HAVE" X "To BE", resulting from the compound of the elements belonging to both axes, as logical entireness, is consistent but not complete sustained by *probability* and *fuzziness* (as scientific and general human elements – "amalgamated" or not, one element with the other. "To BE" upon a probabilistic approach, and "To HAVE" upon a fuzzy approach). But the contemporary humankind accepts and sustains more and more elements within a complex entireness. Referring to all above, this study proposes a *subtle approach*, too – both onto the (hypothetical) existential dimension and onto the representation dimension of our world(s).

The first table with the four cognitive modes contains and obviously suggests the difficulty to associate information and knowledge only and only to some cognitive modes and not to other cognitive modes. Beyond this, it is worth to comprehend that the fragmentation of the rational subject's cognition (at least) oblige "us" to be above (or beyond) this fragmentation in order to be an external (meta) observer (see the *practical sense of* **Gödel**'s *relevance* regarding his two theorems on consistency and completeness within the system of Arithmetic (1931) to the previous "positivist" approach) of the information-knowledge journey. Is it possible?

Considering the existence of this possibility let be an observable information-knowledge dynamics. It would support the rational subject's optional enlargement, regarding his/her theoretic and praxis interests, selecting actual patterns:

(I) **Information** draws out within a *reaction* of a *problematic environment*. [So,] *Rational Subject* **has** Information.

(II) **Knowledge** draws out within an *action* onto a *problematic environment*. [So,] rational subject **is** knowledge.

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The above "drawn out" statement tries to focus on an *invariance*, according to *a harmonized methodology* (between very different patterns emerging from co-aimed (re)search – it is proposed a new level to approach within, onto, by our *initial actions* and *constituted problems* (within *risk*, *uncertainty*, and *"over-complexity"*). This new approach of the problems is co-constituted just with the constituted problem into its (non)systemic environment (characterized by scientific/(hypothetical) real *dynamic, statistic, selective, heuristic and algorithmic **determinism***) regarding the *Real-Metareal-Transreal-Prereal circular worlds*.

Within this *invariance*, a general frame is proposed, here, as an I/O relation, and an emulative context to the humankind (re)search onto *information-knowledge journey* (Figure 7).

*Let us denominate this relation as "***I/O Wisdom relation****" within the next citations into this study* (Shannon, 1948; Møller, 2006; Langman, 2006; DeTombe, 2009; Dimitrov, 2009; Nicolau and Phillimore, 1998; Luban, 2006; Mark, 2006).

Just at this level of the study, a minimal statement/remark is necessary, according to the drawn out *invariance*, within, from, by "I/O Wisdom relation":

- REMARK 3: The *INFORMATION concept/construct* may relate the **objectiveness** from our Macrocosm, humankind communities, biological being and Microcosm – all of these levels of (hypothetical) reality, as *entireness* – and relating the "same" objectiveness within, from, by *each level of reality*.

In parallel, a Rational Subject (individually and within a community – as an actor within, from, by each level of (hypothetical) reality, but not applying toward the entireness) is subjectively determined by the *KNOWLEDGE concept/construct*. It may be related to the *internalized information* from *inside and outside* of *an interactive*. The **explicit knowledge** may be transferred – but the **implicit knowledge** (unable to be directly transferred) may firstly pave the ways inside any I/O relation, individually, within a community, onto a regional, continental and/or planetary context of the Humankind, as the above general frame of the "I/O Wisdom relation" presents (Nonaka and Takeuchi, 1995; Sveiby, 2001; Tschang, 2002).

(*CR III*)
Regarding the Mind and Information-Knowledge journey

(*III.1*)   *DREAM <<==>> PROJECT <<==>> REMEMBRANCE*

          push / alienation <===> pull / happiness <===> project expertise

(*III.2*)   *DATA <==> MIND <==> K_MIND <==> MIND_Inf <==> DATA*

          seek / alienation <===> extend / happiness <===> wisdom

(*III.3*)   *CHILDHOOD ==> YOUTH ==> MATURITY*
          GAMES <<===>> LOVE <<===>> WISDOM

Figure 7.

The proposed *information-knowledge journey* is centered by a *dynamics of information-knowledge* – long-term asserted by the rational subject, within an observable track of the innovative mind of the individual/community: capturing and eliciting/discovering and inventing. So, the "uniqueness" of the rational subject may be expressed by a dynamics of information-knowledge:

Do any **Dynamics of Information-Knowledge** have a non-observable track of the innovative mind of the individual/community?
   If "NO", then our circular worlds may be a deterministic one. If "YES", then our circular worlds may be a more complex one than a deterministic one.

   This and these "an**other type of knowledge**" is used within the respective Knowledge Transfer (individuals, families, schools, universities, academies, communities, information and knowledge functionally dedicated organizations, mass-media, structural interactive organizations), being a part of the skeleton of the humankind evolving. Meantime, after a period of maturation, this revised "an**other type of knowledge**" draws up the **information** about the status of the respective humankind communities [. . .] taking part into the windmills topoi [. . .] and so on – toward a larger *Information-Knowledge corpus*, supporting and/or supposing the existence of an "entire" *Information-Knowledge corpus*. This is a part of the expanded view regarding the "INFORMATION<=> KNOWLEDGE" from the "I/O Wisdom relation".
      The proposed Information-Knowledge journey is a response to the inquiry on the **complexity** of the "larger" and "entire" tensions regarding the "I/O Wisdom relation".

These mental heritage, challenges and perspective patterns are consonant to a large contemporary bibliography – within the context of *REMARK 3*, let us return to the frame of Table II:

- REMARK 4: An **analytical** cognitive mode within *discursive* embodiment (within his/her "temporal" evolving), and promoted by a *reflexive* self (within his/her "spatial" area(s)) is processing *information and explicit knowledge* – in time and space: his/her "temporal" evolving and his/her "spatial" area(s).

- All the other three cognitive modes (*holistic; experimental; experiential*) are processing *information and explicit knowledge* – in time and space – but within their proper shift (compared to **analytical** cognitive mode) are under the circumstances of this *REMARK*.

- The **holistic** cognitive mode introduces a proper shift from the *discursive* embodiment to an *intuitive* embodiment (within his/her "temporal" evolving). It is to gain the innovative capacity to avoid a continuous and/or monotonous *discursive effort, in favor of an intuitive effort (within a proper/"kairos"-like moment)* – **beyond time**.

- The **experimental** cognitive mode introduces a proper shift promoted not from an ego-centric *reflexive* self but from an empirical self (within his/her "spatial" area(s)). It is to gain the innovative capacity to avoid an ego-centric *reflexive self, "intro-opened", in favor of an empirical self, "extro-opened" (within a proper step by step attaining toward an universal-like space)* – **beyond space**.

- The **experiential** cognitive mode offers both proper shifts:

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    – from the *discursive* embodiment to an *intuitive* embodiment (within his/her "temporal" evolving); and

    – from an ego-centric *reflexive* self to an empirical self (within his/her "spatial" area(s)). There is a beyond space and beyond time dual shift.

So, under the circumstances of *REMARK 4*, and within the context of the frames of Tables II and III, all the other three cognitive modes (*holistic; experimental; experiential*) are processing *information and explicit knowledge* – in time and space – but *implicit knowledge*, also, respectively, **beyond space** and, respectively, **beyond time,** according to the **acted shift** (compared to *analytical* cognitive mode).

    So, there is a possibility to inquire on knowledge as a "uniqueness" of the rational subject: to accept and to act according to the *varieties of the cognitive modes*.

    This uniqueness seems to be like suitability, an exclusive property, an advent, an advancement of the rational subject: *a harmonization* **beyond space and beyond time** *of "our" time and "our" space* – supposing the existence of *implicit knowledge* as *satisfactory knowledge* – *within natural and communities' complexity. Real-Metareal-Transreal-Prereal circular worlds would support the subtle outlook* (**soN**...**Osck**) as an *(axiomatic) subtle approach onto our anthropic world(s) – into this context of "beyond".*

    Is this condition "a harmonization beyond space and beyond time of "our" time and "our" space another correlated threshold to the attempt from the background of anthropic symmetric systems to asymmetric systems?

Table III.
Topoi of multiple asymmetry

1.9 Notes upon a possible comprehension on the knowledge economy and knowledge society, across the circular world(s)

To return to the representational space generated by two dimensions/dichotomies (the first frame), and to the "PROBLEM MODES" (the third frame), within the common track (sheaf) of the interactive modeling step: [REFLEXIVE] [EMPIRICAL]/ [DISCURSIVE] [INTUITIVE]//[ANALYTIC] [HOLISTIC] [EXPERIMENTAL] [EXPERIENTIAL].

It is possible imply a SPACE-TIME inquiry regarding the dichotomies I and II, and to find:

(I) *[reflexive] extending/[empiric] [seeking] dichotomy* as an expression of *a SPATIAL ORIENTED natural gift* to the rational subject. It is "**to have**" and to place his/her mind in one from the two ways:

  · as *SPATIAL re-acting* within information-knowledge journey; or

  · as *BEYOND SPACE absorbent re-acting* within information-knowledge journey.

(II) *[discursive] social/[intuitive] individual dichotomy* as an expression of *a TEMPORAL ORIENTED personal effort* of the evolving rational subject. It is "**to be**" and to place his/her mind in one from the two ways:

  · *TEMPORAL* as *continuous and uniform acting* within information-knowledge journey; or

  · BEYOND TIME as discontinuous and impulsion acting within information-knowledge journey.

A possible comprehension would be.

  REMARK 5 (Tables IV-VI):

  (I) **Knowledge Economy** has emerged, in *SPACE* and *BEYOND TIME*, within a *complex reaction of a problematic competitive environment. Rational subject* **has** information and explicit knowledge.

  (II) **Knowledge Society** has emerged, in *BEYOND SPACE* and *TIME*, within an *aggregated action* onto a *problematic consensus environment*. Rational subject **is** implicit knowledge.

There may be comprehended possible varieties of remarks for ***Information Society***, and ***New Economy.***

2. Sources of subtleness

If the emergent presentation of the actual personalized patterns, within information-knowledge dynamics, would be accepted, then one can try to find a prospected evolution of the initial "Information-Knowledge corpus".

To put this prospected task in relation to the above-comprehended contemporary concepts: ***Knowledge Economy*** and ***Knowledge Society.***

So, into the information-knowledge corpus, supposing the prevalence of dynamic and probabilistic determinism, the reality of our circular worlds affirms the existence of knowledge economy and knowledge society. For all working hard into these contexts the above affirmation is obvious. But, for an external observer (at least) it is necessary to have not only the affirmation regarding the insight and action within the

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Information and/or implicit/explicit knowledge and their explanations/understandings	Related explanation(s) and understanding(s)
I. Information and (explicit) knowledge	To have; to extend; discovery; subjective track; natural rhythm; reflexive seen collaboration
II. (Implicit) Knowledge	To be; to seek; invention; objective track; natural circularity, codification
III. Explicit knowledge	Socialized result
	Re-acting company
	Networking/rational choosing/geomodernity/mind-pull for resources and/or
	Holistic seen collaboration/systemization/ transdisciplinarity/eastern hemisphere-pull for resources
IV. Implicit knowledge	Combinatorial start-result
	Referring and acting rational subject
	Complexifying/constructive acting/fuzzification/western hemisphere-push for experience and/or
	Introspecting/memory building/ structural-phenomenology/mind-push for experience within or without the company support
IX. Modes	Cognitive modes
	Knowledge modes and knowledge management
	Modes as bi-secondary cognitive modes
	Societal modes, and correspondent complementary to risky and uncertain socially modes, are related to the correspondent cognitive modes
Common cognitive basis of the subtle outlook (soN…Osck)	[REFLEXIVE] [EMPIRICAL] [DISCURSIVE] [INTUITIVE] [ANALYTIC] [HOLISTIC] [EXPERIMENTAL] [EXPERIENTIAL]

Table IV.
On information, explicit knowledge, and implicit knowledge (see CR I)

Space-time [COGNITIVE and] PROBLEM MODES	TEMPORAL as continuous and uniform (re-)acting [DISCURSIVE] social	BEYOND TIME as discontinuous and impulsion (re-)acting [INTUITIVE] individual vs community
SPACE (re-)acting [REFLEXIVE] extending BEYOND SPACE (re-)acting [EMPIRICAL] seeking	Information society [ANALYTIC] networking New economy [EXPERIMENTAL] complexifying	Knowledge economy [HOLISTIC] collaboration Knowledge society [EXPERIENTIAL] Introspecting

Table V.
Space-time/problem modes (see CR I)

reality, it is necessary, also, to have a model (a set of models). A student, any learner, would use the model – if it exists. A specialized person may realize this model – within an interactive effort to comprehend the reality; within the current use of *probability* and *information theories*, on one hand, and *fuzzy sets* on another hand. Within the model, may be involved the use of a contemporary stage of epistemology (e.g. divided into the following part: knowledge; perception; skepticism – or according to another stage) – which means an entire track of human thinking regarding knowledge.

The actual model(s) for knowledge economy and knowledge society would be elemental based on probabilities and fuzziness.

As participant to this information-knowledge journey, one can claim more than actual approaches. So, let us use a natural existing term, referring the idea of a mathematician, ***Petre Osmãtescu*** (Osmãtescu *et al.*, 2000); he was revisiting into a formal manner Spinoza's approach to our circular worlds and God. Let us use the term "***subtleness***", and so to imply (through a kind of axiomatic power of a denomination) a *subtle profoundness* regarding the *information-knowledge corpus*.

But, does subtle profoundness exist beyond probabilistic and fuzzy approaches for Knowledge Economy and Knowledge Society? Here, it is proposed the affirmative answer, sustained on three short-presented arguments – as *(hypothetical) sources of subtleness*:

(Hypothetical) Source 1 related to our VARIETY.

There is a contemporary fragmentation of ***human thinking*** (see the final detailed note within the fifth frame of the comparative core study).

One of the presented "fragments" may be in act; the other "fragments" are passive versus the respective act of human thinking.

There is a *subtle evolving* of this fragmentation within the *six frames of the presented information-knowledge journey*, within the presented information-knowledge dynamics, within comprehension on the *knowledge economy and knowledge society* (Tables II-VI) (Kalman *et al.*, 1969; Klir, 1969; Mesarovic *et al.*, 1970; Belis and Snow, 2002).

(Hypothetical) ***Source 2*** *related to our SIMPLE PROCEDURES*.

There is an implication of ***circularity and rhythm*** as generalized co-patterns of the humankind – not only into the (hypothetical) real circular worlds, but into the model world, too (so let accept, at least, two-three worlds: *real world* and *model world/metareal or prereal*). It is a *subtle implication*: the use of both heuristics and

SPACE-TIME MODES	TEMPORAL as social	BEYOND TIME as individual vs community
SPACE as extending	INFORMATION SOCIETY Mihailo Mesarovic (hierarchical systems co-ordinability)	KNOWLEDGE ECONOMY John von Neumann (Utility theory within economic behavior)
BEYOND SPACE as seeking	NEW ECONOMY Nicholas Georgescu-Roegen (bioeconomy and decollation insight)	KNOWLEDGE SOCIETY Herbert Simon (administrative behavior and satisfaction criteria beyond optimality)

Note: ("see" its topoi of multiple asymmetry)

Table VI.
SPACE-TIME MODES

algorithms, as two open sets of models within potential frames to be selected by the rational subject. There is not a universal selection rule. There are two connected/argumentative facts:

(1) The most prevalent *types of algorithms* (within their areas supporting a known *convergence*) seem to be **circularly** linked (Flake, 1998): *complex systems* – environmental feedback – *adaptation* – self-reference – *computation* – structural self-similarity – *Fractals* – functional self-similarity – *Chaos* – multiplicity and parallelism – (and the *circularly* linkage toward the) *complex systems*.

(2) The most known *heuristics* (Pearl, 1990) seem to be divergent into a conceptually transformed space, supporting a kind of *rhythm* and *divergence*.

(More, within an empirically stated comprehension: the *types of algorithms* supporting a known *convergence* seem to be *circularly* linked AND the *heuristics* supporting a *divergent* trajectory into a conceptually transformed space seem to be *rhythmically* linked, ONTO a larger implication of *circularity and rhythm* as generalized co-patterns of the humankind. See the couples of *AXIOM 1, 2, 3, and relation "I/O Wisdom relation", and "then" (CR II) – downward*).

(Hypothetical) Source 3 related to our COMPLEX POSSIBILITIES.
A meta-model as a corpus aggregating our humankind ways to/of **action** has a *non-regular form* of the entireness:

(1) There is an embedded *circular form of* **information1-decision-action-information2**.

(2) There is an embedded *open sequential form (subtle rhythmic) of* **awareness-insight-action**.

The separate *two forms* may be imagined as prevalent on the two imaginary *opposite sides* of an *imaginary subtle corpus* (a geometrical shape; a quadrilateral shape into a first stage of observation) referring our action into our world(s) (obvious based on information-knowledge). Let denominate this corpus aggregating our humankind ways to/of action as *the non-regular form corpus* of the entireness – a *subtle corpus*.

("See" the topoi of multiple asymmetries within Tables II and VI.).

Let shortly present the three (hypothetical) sources of subtleness, as:

(1) **fragmentation of human thinking**;

(2) **circularity and rhythm**; and

(3) **non-regular form corpus**.

REMARK 6: All these three (hypothetical) sources of subtleness synthesize through re-collation the above-three paragraphs of this study, enriching them, and then as a result, enriching this (fourth) paragraph, too. This enrichment belongs, also, to the information-knowledge journey – accepting, or not, a subtle approach regarding the modeling of our world(s) – *combining or not the probabilistic and fuzzy approaches with a subtle approach*.
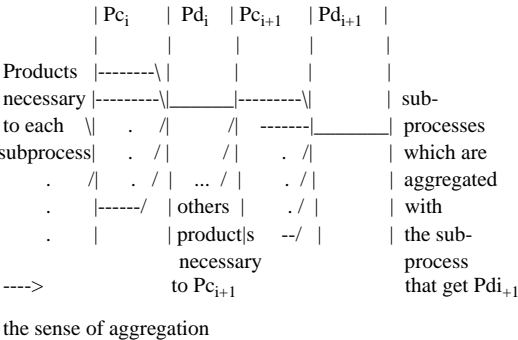
3. Possible extended conceptual relations regarding information and knowledge

(Other) three AXIOMS based on conceptual denominations:

- *AXIOM* [*]*4*. There is a worldwide **"initial" information-knowledge corpus**, supporting an *information-knowledge journey (within the inner rational subject, as actor: acting and reacting)*.
- *AXIOM* [*]*5*. The *information-knowledge corpus draws out (within the inner/external rational subject, as actor: acting and reacting/referring)* the concepts *information society, new economy, knowledge economy and knowledge society*.
- *AXIOM* [*]*6*. There is an **evolving** of any concept emerged through the information-knowledge corpus. Thus, all these contribute to *enrich the initial corpus (within, from, by the inner/external rational subject, as actor: acting and reacting/referring/restructuring the initial information-knowledge corpus)*.
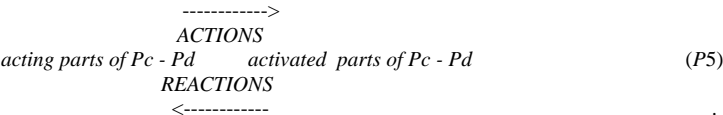
According to these three *AXIOMS ([*]4- [*]6)*, the depicted *Remarks (1-6)* and the affirmed *(hypothetical) source of subtleness (1-3)*, all these make possible to express the following *conceptual relations (CR)* (Figures 8-10):

> *Note: Into the complex contemporary Information-Knowledge corpus, the conceptual relations I-III (as a synthetic outlook of the entire information-knowledge journey) are not homogeneous (regarding the type of entities and their treatment)*. Table VII presents this heterogeneous characteristic.

```
                | Pc_i    | Pd_i  | Pc_i+1   | Pd_i+1  |
                |         |       |          |         |
Products  |-------\|       |          |         |
necessary |--------\|_____|---------\|       | sub-
to each   \|    .   /|       /| -------|_____| processes
subprocess|    .  /|      /|     .  /|       | which are
      .   /|   .  / |   ... / |    .  /|       | aggregated
      .   |------/  | others |     ./ |       | with
      .   |         | product|s   --/  |       | the sub-
                      necessary           process
----->               to Pc_i+1           that get Pdi_i+1
```

the sense of aggregation

A section within the continuous chain Pc - Pd   *(P 4)*.

Figure 8.

```
              ------------>
                ACTIONS
  acting parts of Pc - Pd      activated  parts of Pc - Pd          (P5)
                REACTIONS
              <------------                                   .
```

Figure 9.

resources <==> teams <==> (sub)systems <==> resources / problems   *(P6)*,
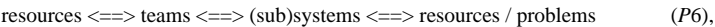
Figure 10.

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4. Axiomatic dependencies and related references to the (general knowledgeable) truth – refereeing the information-knowledge corpus

As a synthetic answer, Table VII has also an elaborated background containing some relative doubts related to the contemporary stage of the information-knowledge journey. Let divide this background, and so, let express some findings as.

Some axiomatic dependencies (entity **DEP**: group of entities):

- *Being* **DEP1**: the triad (body; soul; and spirit) – and its varieties, including the materialistic (also axiomatic) conception of the (singular) body.
- *Soul* **DEP2**: (mind (representation)).
- *Spirit* **DEP3**: (consciousness (representation of representation)).
- *Human being* **DEP4**: (mind * consciousness (representation **o** representation of representation)).
- *Community Being* **DEP5**: (collective mind * collective consciousness (representation **o** representation of representation)).

(Here, the signs "*" and "**o**" refers complex operation of composition between the entities of the respective group.).

References to the (general knowledgeable) Truth.

These references would be dedicated to some "independent" dimensions of the human and community beings evolving and life: truth, value, praxis, moral, beauty, [. . .] logic, axiology, praxiology, ethics, esthetics, [. . .] These "independent" dimensions are some of the actual humankind acquisitions, re-accrediting ancient and old disciplines, which evolve from generation to generation but confirming a complex stationary thesaurus.

Into the most observable cases, the earthly beings do not treat independently the above-enumerated dimensions, and consequently there is not an epistemic space generated (analytically) according to these "independent" dimensions. Let consider a moment (into the humankind information-knowledge journey) that this type of epistemic space would be reached concordant to the (hypothetical reality). (Let all these to be considered only and only to make possible a prospective insight refereeing the information-knowledge corpus.).

Tables VIII and IX would be the effects of these considerations.

Table VIII (refereeing only and only the dimension of the (general knowledgeable) truth/and occurring the logic discipline, only and only).

Table IX (refereeing not only the concepts of probability and fuzziness, but also the concept of subtleness – within their possible dimensions).

Entities	Global	Treatment	
		Local	
GLOBAL	(CR I)	(CR II)	
LOCAL	(CR III)	The hard work within	
		Information society, new economy	
		Knowledge economy and knowledge society	

Table VII.
Entities/treatment

References to the (general knowledgeable) truth through "a" LOGIC with "an other" LOGIC		LOGIC OF FREE CHOICE Related to a promoter and/or a community; partially describing the human being and/or the community being	
LOGIC OF NATURAL GIFTS Related to a promoter and/or a sequence of promoters; partially describing the human being	FOUR COMPOSITIONS OF "a" LOGIC with "an other" LOGIC (main characteristics)	LOGIC OF DATA EXPLOSION	LOGIC OF DATA IMPLOSION
	LOGIC OF INTRO-VERSION	LOGIC OF (IN)DIFFERENCE (geomodernity; number; and step-by-step convergence)	LOGIC OF (SELF)CONFIDENCE (transdisciplinarity; innovation; and assistance)
		BELIVER'S LOGIC (original sin; mystery; and resurrection)	PRAYER'S LOGIC (threshold; relative yes; and relative no)
	LOGIC OF EXTRO-VERSION	* LOGIC OF (SINGULAR) MOSAIC (fuzziness; structure; and vague divergence)	* LOGIC OF (IN)SEPARATION (structural-phenomenology; info-matter; and light)
		** PILGRIM'S LOGIC (diversity; de-construct; and re-construct)	** CHRIST'S LOGIC (hope; faith; love; and light)

Table VIII.
On the (general knowledgeable) truth – through LOGIC(S)

Probability, fuzziness, subtleness/ their possible dimensions	Order/extra-order	The associate dimension from a {To Be X To HAVE X To COMMUNE} space	The focalization "inside the varieties" of LOGIC(S)	DEP
Probability	Order inward our Process_Produces chain (P 4)	To BE	LOGIC OF NATURAL GIFTS; (in sequence of two logics) LOGIC OF FREE CHOICE	DEP1
Fuzziness	Extra-ordinary events into our Process_ Produces chain (P 4) Ordinary events into an extra-ordinary Process_Produces sub_chain	To HAVE	LOGIC OF NATURAL GIFTS X (a bi-tabular composition as in Table VIII) LOGIC OF FREE CHOICE	DEP2 DEP3 DEP4
Subtleness	Extra-Order inward our Process_Produces chain (P 4)	To COM-MUNE accord-ing to (P 4) and (P 5)	LOGIC OF (RE)MEETING OF ALL THE FORERUNNERS (OF ALL THESE LOGICS) (Beyond Table VIII)	DEP5

Table IX.
Probability, fuzziness, subtleness/their possible dimensions

Into this context, to introduce a model of the *chain of processes/sub-processes – products* (obvious within the real world), that concerns with the *equilibrium of **a** Mixed System (Eq_MS)*.

A process – Pc, decomposed into its sub-processes, is not isolated. Its real surroundings consist of a continuous chain of processes and products – Pd; this chain exits inside (at least one) human-machine (mixed) system (Figure 11).

In order to represent the reality of a human-machine system, to present a sociocybernetic insight (Figure 12).

The *P5* has a general and synthetic character. More analytical seems to be (Figure 13): whose resources are human or/and technical – proper to mixed systems.

- **Order**: a step by step application to elicit a methodology to find the truth (according to or better than affirmed by Tables VIII and IX).

- **Extra-order**: otherwise than an application to elicit a methodology to find the truth.

There are some circular worlds – maybe there are other worlds, too:

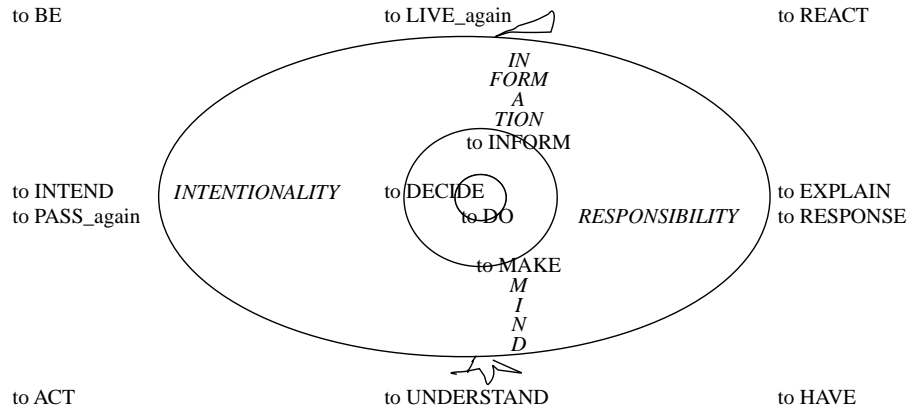| worlds:	Real World	Metareal World	Transreal World	Prereal World	*the returning at the Real World*
basic verbs	to BE	to HAVE	to COMBINE	to CONCORD	to CONDUCT
exemplar proofs	*SCIENCE _exist.*	*POETRY _exist.*	*PHIPOSOPHY*	*SCIENCE_poss. POETRY_poss.*	*MANAGEMENT, LAW and POLITICS*
		ARTS_exist. SCIENCE_poss.	*THEOLOGY*	*ART_poss.*	
eminent climax	V. von Braun A. Einstein N. Wiener J. von Neumann	M. Eminescu C. Brancusi I. Kant & A. Smith	Socrates / Plato Christ Apostle Paul M. Heidegger	K. Gödel C. Baudelaire S. Dali	Hammurabi Solon Alexander the Great M. Gandhi

Figure 11.

Figure 12.

to BE	EXISTANCE	LIVING_again	REACTION
	PASSING_again	qualia	EXPLANATION
	ACTION	UNDERSTANDING	OWNERSHIP

to HAVE

---

to BE	PREREAL	possibility	causal determinism
	METAREAL	qualia	heuristics
	REAL	TRANSREAL	probability

to HAVE

---

to BE ‖	PREREAL	POSIBILITY	CAUSAL DETERMINISM
‖	METAREAL	qualia	HEURISTICS
‖	REAL	TRANSREAL	PROBABILITY

‖══

Continuum (existence; possession)   to HAVE

The profoundness of ∃

/ ‖	PREREAL	*POSIBILITY*	*CAUSAL DETERMINISM*
to BE ‖	METAREAL		*HEURISTICS*
‖		qualia	
‖	REAL	TRANSREAL	*PROBABILITY*

‖   some algebraic *functors*; a description of the entity's structure

‖══

An analysis onto the *profoundness* of (existence; possession); a description of the entity's functionality

The profoundness of ∈/ to HAVE

The profoundness of ∃

a Science-Poetry- Philosophy|Theology-Arts ideal ring // TRANSREAL /// Cosmos Profoundness Zone
          (the unicity of) Science // Humankind Profoundness Nucleus _ Zone

to BE // Poetry; Philosophy, Theology   PREREAL // Internet /// *??_logy*
    Hypertexts; Image files   ⟨ Qualia ⟩   METAREAL / Rationality Zone
     // Systemo_logy   REAL / Logics Nucleus _ Zone
    Body_Soul_Spirit

          TRANSREAL / Laws & Politics // Surveillance /// *?_logy*

          Relational Data Bases
          // Connect_logy
    Originar   Consciousness_reflection of reflection_
    zone   _(substance; energy; information)
          to HAVE // Arts

The profoundness of ∈

*Evolution across the circular worlds – mental concepts around a mental construct (*qualia*) – Cosmos's zones around humankind nuclei*

Figure 13.

4.1 A prospected frame refereeing the information-knowledge corpus

Related to the above-presented dependencies and references, it is drawn out the following set of prospected "evolutions" – gathered into Table X. Into the last column of the table, the refereed convergence and divergence are linked to the *(Hypothetical) Source 2 of subtleness*, and up to the *conceptual relation III (CR III)*.

According to all the rows from Table X, the *Real* $< => $ *Metareal* $<=>$ *Transreal* $<=>$ *Prereal circular worlds would support the subtle outlook* (**soN**...**Osck**) *as an (axiomatic) subtle approach onto our anthropic world(s)*. Also, this subtle outlook (**soN**...**Osck**) is here proposed as a *human-machine nexus* (so, as a structural topoi) – and as a functional topoi to *search for the synergy of humankind production, intelligence and morality*, within **systemic and cybernetic knowingness** within **asymmetric systems.**

4.2 Metaphor, synthetic problem, a set of choice and open problems – at the edge of information-knowledge journey

Knowledge society promotes a track of **new** types of approaching – achieving an evolutionary context to our procedures claiming "progress", otherwise the stationary of **"better"** done would saturate our capacities and performances:

> A *metaphor* to synthesize all the above would point on an architecture innovative trend: from Antonio Gaudi (1852-1926; cathedral "La Sagrada Familia" started at Barcelona in 1883) to Frank Gehry (architect for the Guggenheim Museum at Bilbao in 2005). The plead of these creators draws out architectural entities that do not sustain only a *"better architectural object"*, they propose a *"new architectural object"* within a greater (not only higher) religious topos (Gaudi at Barcelona), and the surprising hosting space (not only higher) for the modern art works (Gehry at Bilbao). This study uses this parallel architecture innovative trend as a metaphor related to *Information Society* and **Knowledge Society** attempts to a *"better life"* and a **"new life"**.
>
> Information Society sustains a *"better life"* respond at a command from society (for, e.g. a *higher* cathedral and a *larger* museum, within the parallel term of this metaphor), only; within maximizing the ratio of Information Technology and Communication (ITC) sub-systems into the initial system.

The *synthetic problem* sustained by this study is represented, here, within the following questions, addressed to any individual, group, firm, entity related to ITC.

The primary question: Do you want to draw out an informational entity (related to ITC) to *make better the life* from the previous similar entity from "our" nature, Humankind and thinking? YES or NO, but within a fuzzy interval.

The explicit YES, within a fuzzy interval, means to belong to INFORMATION SOCIETY. The explicit NO, within a fuzzy interval, means to respond at.

The secondary question: Do you want to elicit an entity to *make a new life* independent from the previous entities from "our" nature, Humankind and thinking? YES or NO, within a fuzzy interval.

The explicit YES, within a fuzzy interval, means to belong to KNOWLEDGE SOCIETY. The explicit NO, within a fuzzy interval, means to respond at.

The tertiary question: ... (a future complete and relatively consistent one; see the next 2.6 open problem).

Please note again that this study proposes to draw out the **subtle profoundness** existing **beyond probabilistic and fuzzy approaches** and *beyond previous entities from "our" nature, Humankind and thinking.*

Probability, fuzziness, subtleness/the prospected "evolutions" of their possible dimensions	Associated triads to the pre-associated dimension from a {To Be X To HAVE X To COMMUNE} space	The evolving LOGIC(S): beyond the focalization "inside the varieties" of LOGIC(S)	DEP and divergence and/or convergence	Systemic and cybernetic knowingness
Probability	To BE the *t*riad T1 (substance; energy; information)	The evolving LOGIC OF NATURAL GIFTS; (in sequence) LOGIC OF FREE CHOICE	Evolving versus DEP1 and a known convergence of the most prevalent algorithms	**1147**
Fuzziness	To HAVE the *t*riad T2 (T1; representation; explicit knowledge)	The evolving LOGIC OF NATURAL GIFTS X (as in Table 10) LOGIC OF FREE CHOICE	Evolving versus DEP2 DEP3 DEP4 and a seeming divergence of the most known heuristics	
Subtleness	To COMMUNE the *t*riad T3 (T2; representation of representation; implicit knowledge)	The evolving LOGIC OF (RE)MEETING OF ALL THE FORERUNNERS (OF ALL THESE LOGICS)	Evolving versus DEP5 and a seeming balance of divergence and convergence of the humankind procedures onto information and knowledge	**Table X.** Probability, fuzziness, subtleness/the prospected "evolutions" of their possible dimensions

What is therefore possible is a methodology to separate but to refer/imply all the above approaches and references within the following two directions (to be comprehended as two steps):

(1) *Direction 1*. The conscious **choice** of an individual, group, firm, entity related to ITC along the information-knowledge journey; according to Tables II-V, or according to another variety. Within this choice and adjacent praxis, one can change, adapt and/or extend the second paragraph of this study (no. of information-knowledge dynamics, and actual personalized patterns); (Searle, 2000; Bulz, 2008).

(2) *Direction 2*. The pre-conscious **focalization** based on *intuition* and *acceptance of subtleness;* subjacent expressed according to Tables II and VI-VIII. Thus, let us to represent and solve the most attractive open problem(s) from the information-knowledge corpus, beyond the changing, adapting and/or extending of the content of other previous paragraphs of this study (after the second paragraph). So, as an initial multiple sample, let us keep in mind open problems, within the context of the "I/O Wisdom relation" (Geyer, 2009; Luban, 2006; Bulz, 2008).

5. Toward a Wienerian view and a dually Göedelian view on a subtle entity/system(e-knowledge and information toward an online *Dictionary on the Morphology of Cybercities*)

This part of the study is a "proof" of the utility of asymmetric systems. It proposes an initial focalization on three very different ranked works – presented into the following box:

1148

(1) Stephen Graham (Ed.). *The Cybercities Reader*. Routledge, New York and London, 440 pp. 2003.

(2) Aydemir, Asly Telli. "Politics of speed in metaphorical space: envisioning the city of the future". dissertation at European Graduate School, Saas-Fee, New York, Dresden, 224 pp. 2004.

(3) *KNOTEN WEIMAR*. Institute at the Bauhaus-Universität Weimar, International Transfer Centre Environmental Technology GmbH, available at: www.bionet.net/

These nuclei of knowledge have a prominent completeness acquired onto very different scientific ways, within a long-term hard work and evolving. Their superlative aspect is obvious, and their societal utility is high. All of them, I presume, will remain, over centuries, into the (virtual a temporal) nacelle of the contemporary conceptual flow *from "Informational Society" toward "Knowledge Society"* (Karvalics, 1998).

Impressed by the **completeness** of these works, any reader could inquire (into two steps) on the each text **consistence**, and then, on the overlapped texts consistence of the three works.

This may be a mental experiment, supported by inter/transdisciplinary aims dedicated to the area of Morphology of Cybercities.

Any other two, three, or more works may be inquired (into two steps), if they are very different and very high.

The intellectual source for this attempt is the famous discovery published by Gödel (1931).

This proposed enquiry tries to concord the complexity of the system of arithmetic (Gödel's discovery domain) with the morphology of cybercities domain as system, also, within its "Arithmetic", *de facto* an innovative logic of city evolving.

Also, the systemic and cybernetics support for the involving of asymmetric systems is seen from the innovative break of the Wiener's (1948) book: *Cybernetics or Control and Communication in the Animal and the Machine* (Vallée, 1995).

The supposed result would be able to compare the extrapolated necessity for a meta-system to approach "both" completeness and consistency into both domains, or to find another meta-methodological way.

Into this study, the alternative status to be proposed is the fulfillment of an online *Dictionary on the Consistency of the Morphology of Cybercities*. This should expect and mean that the communities of cybercitizens and cyber/architects is link-able to architect and make this online dictionary, too, answering and controlling (into a deep democratic and open scientific manner) the balance of completeness and consistency regarding the innovative Logic of THEIR city evolving. So, this way tries to merge the hard analyzing tasks with the inter-adaptation of the parts into the whole entity: the actual and future cybercities.

A contemporary cyber-urban based world within a subtle world (expressing the inter/transdisciplinary efforts within – at least – architecture, sociology, computer science, economic sciences, and logic) must prevail through:

- Its new logical capacity (multilevel fuzzy including "tertium", opposite_complementary item, variety of co-ordination balancing the self-organizing nuclei) (Zadeh, 1965).

- The arborescent tree of knowledge inward an entire "forest" including different types of trees of knowledge, decision, act, existence, and ownership (Simon, 1957; Vallée, 1995; Hopfield, 1985).
- The radial tree of life embedding the individual-community extended links, the assisted birth and death, the heuristic flowering, the universal-individual-planetary trend (Wiener, 1948; Haret, 1910).
- The new lexical linkage (not only expressed by the humankind, but self-recognizing the humankind) within a syntax, semantics, praxis overwhelmed by the morality, intelligence, production_processing parallel societal flows (Bonabeau *et al.*, 1999; Indurkhya, 1987).
- The fairness as a result of a total inclusion from invention/discoveries to technology, to industry, to economy, to society – none of these to be (self-)excluded from the total inclusion (not generating "castes" of any types: financial, banking, professional, and ideological – over the synergic part-entireness natural sense); the classes being a synergy implementation (Haken, 1983; Mesarovic and Pestel, 1974; Gulliver and Ghinea, 2004).
- The equitable world as an embedded result from the equalizer triangle of the humankind subtleties within, also, sustainable world and societal world; this triangle being an anti-entropy implementation (Osmătescu *et al.*, 2000).
- The social stratification being a "single face" social stratification; this being an ephemerality implementation (To have ephemerality means to act better and better with less and less resources vs restricted time.) (Bărbat, 2003).
- The theory and praxis regarding the interactive modeling of the cybercity corpus within some new types of neural networks (Albus, 1991; Dimitrov, 2009; Dubois, 1998). These neural networks would replace the imbedded input-hidden strata-output structure with a hierarchical orientated one, and to strengthen the awareness-insight-action orientation/procedure together with the belief-desire-emotion orientation.
- The open-related structure and function of this type of an online *Dictionary of Consistency* (onto all above-presented inter/transdisciplinary efforts) (Simon, 1965).

This study tries to engage the theoretic and praxis approach regarding a transmodern city/region embedded into the present and future Cybercity.

Toward a transmodern city/region one would choice a path. What possibility, from the following list, would prevail?:

(1) *Systemic non-consistence (contradiction) but completeness* for each domain, within the realization of an "expanding" concept of matter and spirituality – prevailing a *Wienerian view* on the information and knowledge as (a)symmetric concepts/constructs – toward a information/knowledge economy/society/ i.e. information society and/or information economy and/or knowledge economy and/or knowledge society.

(2) *Non-systemic consistence and completeness* for each domain (non-emerging from an equivalent Gödel theorem frame).

(3) *Systemic fuzzy consistence and completeness* for each domain (emerging from a non-equivalent Gödel theorem frame and a non-equivalent Arrow theorem frame).

(4) *Non-systemic consistence and completeness for each domain* (emerging from a non-equivalent Gödel (1931) theorem frame, a non-equivalent Arrow (1963) theorem frame, and a non-equivalent Pãun (1977) *impossibility indicator aggregation frame* – prevailing a *dually Göedelian view* on the observability and controllability of a subtle entity/non-system – toward a wisdom and/or consciousness society.

This tetra-possibility for the duality information-knowledge would demonstrate (and then must help us with a common evident circularity and rhythm sense) that systemic and non-systemic entities (Bulz, 2008) are strongly related to our observation. Also, to our reflection (of reflection), efficient ideal, and would make us to understand that systemic tension is related to the general system idea as a reconstruction. Also, there are more arguments to sustain that both our systemic tension and ourselves (the finite [?] set of rational subjects; living support systems; artificial and virtual entities) are a general property of the matter (substance; energy; and information-knowledge).

Other possible subjects:

5.1. Observability and controlability within the automatic systems – and a dually Göedelian view on the observability and controllability of a subtle entity/system. Inter and transdisciplinary metaphors and new related terms – in order to attain a new approach on symmetric systems and asymmetric entitities (Gödel, 1931).

5.2. The rational subject triadic face: macrocosmos, self, microcosmos.

5.3. Historian and praxis stimulus semi-cycles on innovative cognition/on harmony and monotony – as functional indicators along the entire cycle/on structural indicators (laws) proposed by Vilfredo Pareto and George Kingsley Zipf – cognitive limits and challenges on innovative cognition.

5.4. (A)symmetry versus observability and controlability within the natural and artificial systems/a dually Göedelian view (Gödel, 1931).

5.4.1. An input/output relation between: information, knowledge, expertise, wisdom, happiness, alienation – a primal Wienerian view on the information and knowledge as (a)symmetric concepts/constructs (Wiener, 1948; Bertalanffy, 1968).

5.4.2. The subtle intersection of two subtle black boxes: information and knowledge.

5.4.3. A proposed information and knowledge journey/inter and transdisciplinarity on linguistic and internet patterns evolution, neuroscience, neurocybernetics, neuromanagement of information and knowledge.

5.4.4. The efforts of finding conceptual invariance and conceptual relations – in order to gain the both possible explications and comprehension on the topics of information-knowledge corpus.

6. Related projects

6.1. (A)symmetry and system – theoretic and praxis. Survey – a primal Wienerian view on the information and knowledge as (a)symmetric concepts/constructs (Wiener, 1948; Bertalanffy, 1968).

6.1.1. Conclusions/(a)symmetric approaches on human being and community:

(1) "to BE": symmetric approaches on human being.

(2) "to HAVE": asymmetric approaches on community.

(3) "to BE x to HAVE": (a)symmetric approaches on human being and community.

6.2. The evolving of systemic relevance to human being (before and after Aristotle's "sustema"); the (a)syncrony relating to (a)symmetry.

6.3. The relations between the systemic symmetry, rational subject, community, humankind – an interactive proposal: creative partnership forum.

6.4. The relations between the ENTIT (*) asymmetry, subtle corpus, human prospect for truth, beauty, goodness, value, rightness, sustainability – possible interactiveness on the Creative Partnership Forum.

6.5. The research dialogue with the Pan and Grey systems on (a)symmetry and subtleness, mainly on systemic methodologies.

6.6. The research dialogue with the paradigmatic approach on (a)symmetry and subtleness, mainly on humankind evolving to a wisdom and/or consciousness society.

6.7. The research dialogue with the synergetic approach on (a)symmetry and subtleness, mainly on the logic(s) and philosophy(ies) related to systems – a possible new perspective on globalization/regionalization.

6.8. The wisdom and/or consciousness society versus the information|knowledege economy|society/revisiting: Mesarovic *et al.* (1970) (hierarchical systems co-ordinability); Neumann and Morgenstern (1953) (utility theory within economic behavior); Georgescu-Roegen (1979) (bioeconomy and decollation insight); Simon (1957) (administrative behavior and satisfaction criteria beyond optimality).

6.8.1. On the composition of an (a)symmetric matter within information|knowledege economy|society:

(1) Inter and transdisciplinary metaphors and new related terms – in order to attain the relevance of the status: rational subject is knowledge/rational subject has information.

(2) "to BE": knowledge society has emerged beyond space and time, within an aggregated action onto a problematic consensual environment. Rational subject is implicit knowledge.

(3) "to HAVE": knowledge economy has emerged in space and beyond time, within a complex reaction of a problematic competitive environment. Rational subject has information and explicit knowledge.

(4) "to BE x to HAVE": (a)symmetric approaches on knowledge society and knowledge economy.

(5) "to BE x to HAVE": forwarding the open definition of subtleness and the related dialogues.

6.9. (A)symmetry and systemic thinking/revisiting Naom Chomsky and Jean Piajet (proposed co-authorship study on holistic and holographic features; the neuroscience and the healing power of language) (Chomsky, 1964; Piaget, 1976).

6.10. Inquiry on subtleness within human being, society, thinking/revisiting [analytic] geomodernity: Peter Sheehan, Bhajan Grewal (Tschang, 2002), Malitza (2000); (holistic) transdisciplinarity: Nicolescu (1996), Belis and Snow (2002), Dubois (1998), Matjaz Mulej; (experimental) fuzzification: Zadeh (1965), Vallée (1995), Negoitã and Ralescu (1975), Teodorescu *et al.* (2001); (experiential) structural-phenomenology: Draganescu (2009)/(proposed co-authorship book).

6.10.1. (A)symmetric flows between nature and society – and a dually Göedelian view on the observability and controllability of a subtle entity/system (Gödel, 1931):

(1) Natural (a)symmetric patterns/science of complexity/fractal objects – and related turning points.

(2) Nuclei and borders/social and societal outlook of a community/groups, classes, and other (a)symmetric references within a community.

(3) Inter and transdisciplinary metaphors and new related terms.

(4) Two proposed terms: systemic symmetry (beyond mathematic symmetry) and ENTIT (*) asymmetry (beyond asymmetrically systemic approach).

(5) Revisiting the triad (production, intelligence and morality): three types of flows between nature and society.

6.10.2. Focusing interactive modeling on (a)symmetry:

(1) Interactive modeling nexus/interactive modeling – a type of reflection onto, into and by society.

(2) A cybernetic model of the contemporary space-time of our evolving.

(3) Possible varieties of thinking and historically proved cognitive modes.

(4) Tabular forms of the world of systemhood and individualhood.

(5) The interaction between the elements of the set (belief; understanding; explanation; praxis).

(6) (e-)world as a (hypothetical) real/model/ideal system. Comprehension after/beyond/in accordance to Plato.

(7) Interactive modeling: connectedness-communication. The infra and hyper-incursion is due to connectedness. The anticipation is due to communication. Inter and transdisciplinary metaphors and new related terms – in order to "relink" the virtual reality and the real virtuality of the connectedness and communication.

Note: (*) Let ENTIT to be a new term, an adjective. It is proposed as resulting from the noun ENTITY, as the adjective SYSTEMIC results from the noun SYSTEM. The resulting "rule" of the adjective ENTIT from the noun ENTITY would be equivalent to that of resulting adjective MAJOR from the noun MAJORITY.

The necessity of this term is connected to the "asymmetry": SYMMETRIC SYSTEM with ASYMMETRIC ENTITY. All these express the potentiality that the $<<$ system $>>$ to be a more restrictive category than the $<<$ entity $>>$.

An example: [some] isolated resources cannot be associated to a systemic approach (i.e. during any transition, mainly under operative constrains); so their set may be better cover by the term entity, than the term system. Another example may be thought on [some]

future resources [e.g. (bio-)nanotehnological resources of the next stage: the core of a motor based on the bio-essence of the rabbit muscle; the sort of silver powder into the next sockets].

The $<<$entit asymmetries$>>$, connected to the above items, would better express the information-knowledge Dynamics on this stage/these stages – and the "classical" systemic symmetries would remain to dynamically express the variation of SYNERGY, NON-ENTROPY and EPHEMERALITY ("to do more and more with less and less resources" – focusing on both symmetric and asymmetric efficiency) on a deterministic, probabilistic/statistic, fuzzy background(s) as systemic and cybernetic representation(s).

This study aims to propose, at least, the review on EPHEMERALITY, within both as asymmetric efficiency or/and subtle efficiency; thus the epistemic role of "SUBTLENESS" being expressed, here, at least through the proposed term of "subtle efficiency"). It is to underline that these new terms are sought on the background(s) of systemic and cybernetic representation(s).

The construct "subtle outlook upon the contemporary interaction: network of sciences [...] observable humankind – within systemic and cybernetic knowingness" is indebted to the diaphoric metaphor: the orchestra playing the conductor's role, and contextually to the interdisciplinary disciplines Sociocybernetics and Cognitive Science and to their stimulating concepts by, with and into the background of world wide web and internet. Also, the introducing of the "subtleness" characteristic regarding our worlds, and our modeling featuring into metareal and prereal entities (may be those metareal and prereal worlds), seems to be a kind of a dually Göedelian view – seeming to be far from a Wienerian view.

These constructs are acting as challenges to the actual stated approach based on "perverse effects"/"unintended consequences", and, respective, "asymmetric conflicts" – contextually promoted within two mono-disciplinary focused disciplines. These two sequences seem to be only and only on a primal Wienerian view. So, complementary (and not on a contradiction constrain), this paper proposes a dually Göedelian view on these two sequences.

Under a condition of "harmonization beyond space and beyond time of $<<$our$>>$ time and $<<$our$>>$ space", the supposed systems to be inquired in order to promote a variance to the above approaches may be those asymmetric systems. One of the possible links would be the recent re-focus on asymmetric information/knowledge within the econometric background.

There are some proposed projects in order to construct a next deeper insight on Knowledge Economy and Society contemporary realities and virtual entity, too.

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